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DETERMINANT FACTORS OF CONDOM USE AMONG MEN SEX MEN AND TRANSGENDER WOMEN IN SOUTHEAST ASIA REGION: A LITERATURE REVIEW

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Abstract

Data from UNAIDS 2017 reported that men sex men (MSM) and other MSM (transgender women) accounted for 12 percent of new human immunodeficiency virus (HIV) infections in 2017. The Asia Pacific region is one of the areas that contribute new HIV cases from MSM and transgender women. Unprotected anal sex is a significant cause of HIV transmission among MSM and transgender women. The study aimed to describe determinant factors of condom use among men sex men and transgender women in the Southeast Asia region. We search literature from various relevant sources. Five databases including PubMed, PROQUEST, Plos One, Science Direct, and Ebsco were included in this study. Several factors that contribute to condom use such as individual factors including attitudes, knowledge related to HIV, decreased sexual pleasure, substance use, and gender presentation. Other factors that influence condom use are family support, peer support, and experience of physical violence and sexual abuse. The type of partner and the amount of pay for sex among transgender women also influence condom use. Several factors are noted from individual, social, family and sex partner. Further research especially intervention research, it is necessary to consider the factors that influence condom use before developing interventions for MSM and transgender women.

Keywords: Determination factor, condom use, men sex men, transgender women

1. Introduction

HIV transmission among the population of men sex men (MSM) and transgender women has spread in various countries in the world and has been widely documented in various studies (1–3). Based on data from UNAIDS 2017 reported that men sex men (MSM) and other MSM (transgender women) accounted for 12 percent of new HIV infections in 2017. The Asia Pacific region is one of the regions that contribute new HIV cases from MSM and transgender women. Indonesia was at the leading position of new HIV infection among MSM in 2016, followed by Australia, Mongolia, Vietnam, and Thailand (1). Three of them are countries in the Southeast Asia region.

Beyrer et al., confirmed that key behaviors that put MSM at greater risk of HIV infection, such as high numbers of multiple and concurrent sexual partners,

unprotected anal intercourse (UAI), and low rates of HIV testing. Unprotected anal sex is a significant cause of HIV transmission among MSM and transgender women in the world (4–9).

Increasing condom use as a means to reduce the number of HIV infections among MSM is a public health priority, and an essential component in prevention programs globally (1,11). The risk of HIV transmission in unprotected anal sex is 18 times higher than unprotected vaginal sex (12–14), and 70% of the risk of HIV transmission can be avoided by consistently using a condom (11).

Several previous studies only examined related individual factors such as psychosocial factors and personal readiness to use condoms (15–18). Although there are some who examine factors outside of different elements, they have not adequately represented all aspects that influence determinant factors. Thus, research needs to be conducted to assess overall factors that affect condom use among MSM and transgender people in the Southeast Asian region. Identifying factors that influence condom use is essential for designing effective prevention programs for populations such as MSM and transgender.

2. Objective

The study aimed to describe determinant factors of condom use among men sex men and transgender women in the Southeast Asia region.

3. Methods

The literature review has used PRISMA to describe the determinants of condom use from individuals, families, social and sex partners.

3.1 Eligibility Criteria

We included various types of studies including quantitative research and qualitative research to describe the factors that influence condom use from individuals, social, family and sex partners we only analyze some articles that have examined the determinants of condom use in MSM and transgender women just in the Southeast Asian region.

3.2 Search Strategy

We conducted the search strategy to find the relevant articles related to factor determinant of condom use. The search strategies, including "Factor Influence, " determinant, "condom use," "men sex men," "male to female transgender" "transgender women."

3.3 Study Selection

Five databases including PubMed, PROQUEST, Plos One, Science Direct, and Ebsco were included in this study. We investigated the relevant articles published in the English version. After removing similar or duplicate articles, related articles were retrieved.

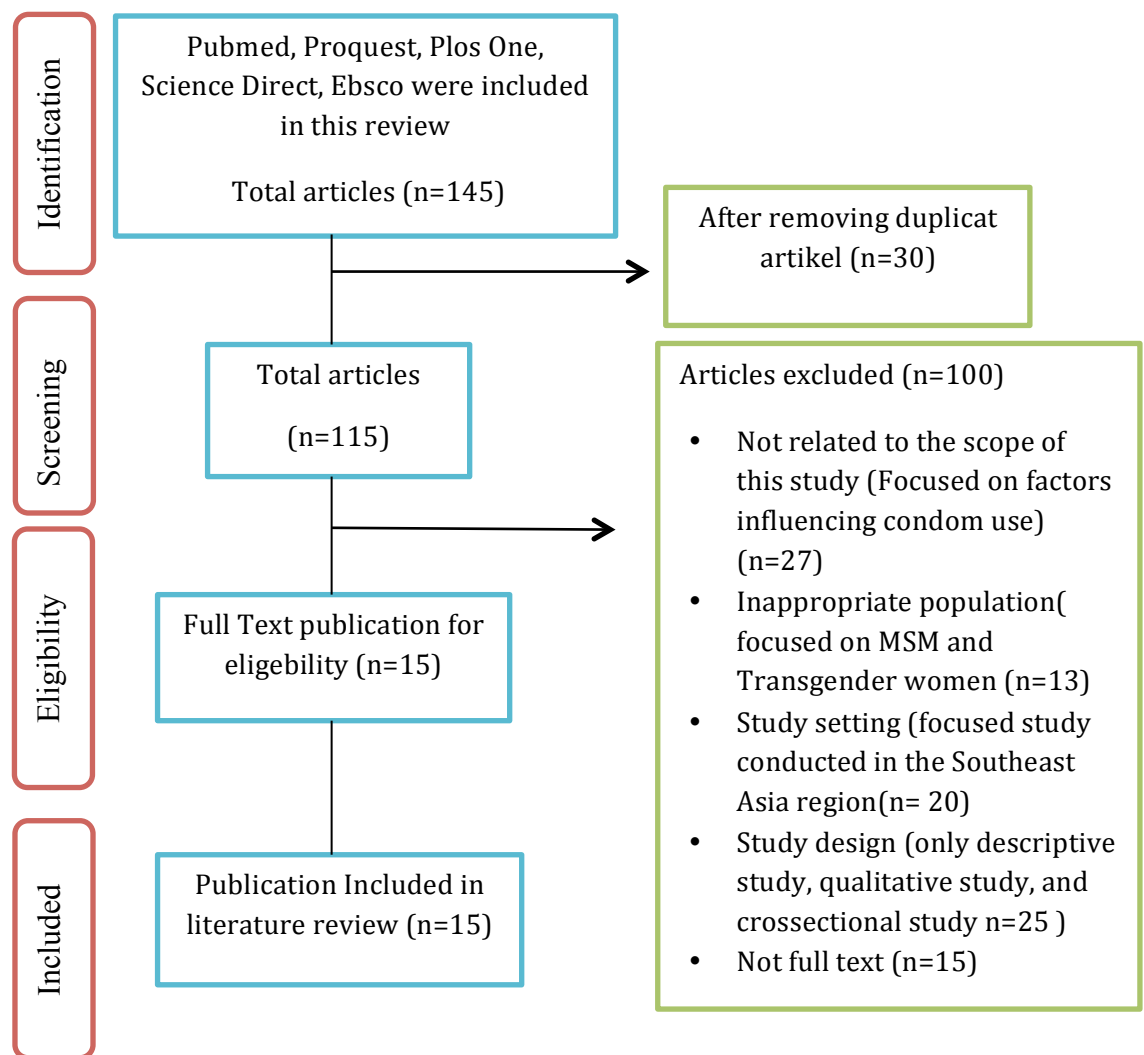


Figure 1.Summary of evidence search and selection

4. Results

4.1 Study Description

Figure one has described the process of the study selection. Five electronic databases provided 83 references related to the topic. Only fifteen full-text studies were included in our review. Fifteen articles selected in this literature review were conducted in various countries such as four from Indonesia, four from Thailand, two from Malaysia, two from Vietnam, one from Cambodia dan one from Myanmar.

4.2 Determinant Factor Condom Use

Determinants of condom use would be categorized into individual factors, social and family factors and sex partner factors. Detailed elements are described as follows:

4.2.1 *Individual Factors*

Knowledge about HIV and STI

Level of awareness about HIV and sexually transmitted diseases is related to condom use in MSM and transgender women. A study conducted among transgender women by Safika et al. that low HIV-related knowledge was associated with low condom use during anal intercourse (19). Qualitative research conducted by Nelsensius et al. among MSM showed that a low level of awareness about HIV and other sexually transmitted diseases affected low desire to access and use a condom (20).

Attitude condom use

Attitude is one of the important factors that influence condom use in MSM and transgender women. Cross-sectional studies conducted in Indonesia explain that attitudes about condom use would affect condom use including intention and behavior to get condoms, carry condoms, offer condoms and use condoms during anal intercourse (18).

Decreased Sexual Pleasure

The effect of condom use on sexual pleasure is also considered a factor that affects condom use. Qualitative research conducted by Nelsensius et al. Shows that the use of condoms during sexual intercourse will reduce sexual pleasure (20). This study is supported by Mimiaga et al. decreased sexual sensation caused by condom use. The impact of a decrease in sexual desire is inconsistent condom use during sexual intercourse (21).

Substance Use

Substance use is a factor that is significantly related to condom use. Substance use includes drug use and alcohol consumption. Five studies show that using drugs such as marijuana, poppers, ecstasy, ATS, and metamfetamine before sex is significantly associated with inconsistency condom use (22–25). Furthermore, alcohol use was also related to condom use (22,25–27). The result of a study conducted by Garcia et al., use alcohol before sex affect condom use is 1,5 lower than not using alcohol and also effective to the inconsistency of condom use (28).

Gender Presentation

Gender Presentation is also contributed to condom use. According to Li et al., MSM as bottom had the highest level of unprotected sexual

(not using a condom) for last anal sex and MSM as the top is significantly related to condom use during sexual intercourse and report consistent in condom use for sexual intercourse in the previous six months (29). This study is supported by a survey conducted by Vu et al. that low condom use in the individual as a receptive (bottom) (30).

4.2.2 *Social and Family Factor*

Social and family support

Social and family support also has an indirect effect on condom use. Qualitative research reveals that peer support and family support will increase the desire to access condoms (20). Another qualitative study showed that respondents obtained condoms from their peers (21). Another factor that influences condom use is the presence of families, especially parents. MSM who live alone is significantly associated with the inconsistency of condom use compared to MSM who live with parents (31).

Physical Violence and Sexual Abuse

Physical violence and sexual abuse can affect condom use. The experience of physical violence from family members such as a father or brother has an indirect impact on the low use of condoms. Those who have experienced violence from family members tend not to use condoms during sexual relations (19,32). Besides physical violence, the experience of sexual abuse also has an impact on condom use. Research conducted by Chemnasiri et al. That individuals who experience sexual abuse will tend not to use condoms when having sex (31).

4.2.3 *Sex Partner*

Partner Type

Sex partners have an essential role in condom use both in MSM and transvestites. Research conducted by Safika et al. on MSM in Indonesia shows that condom use is related to the type of sex partner. Condom use is high in regular couples compared to casual couples and commercial partners. Other studies also described that condom use with longterm partners, steady partners and regular partner is lower than casual partners (22,23,28).

Payment for sex

Especially for transgender women as sex workers, the amount of pay also affects to condom use. Research conducted by Toouru on Transgender women in Thailand revealed that transgender sex workers don't use a condom if they are paid extra money. The higher payment for sex, the lower condom use (22,32).

5. Discussion

Less of condom use is one of the risky sexual behaviors that can increase the transmission of HIV in MSM and transgender women. Several factors that contribute to condom use such as individual factors include attitudes related to condom use, knowledge related to HIV, decreased sexual pleasure, substance use, and gender presentation. Other factors that influence condom use are family support, peer support, and experience of physical violence and sexual abuse. The type of partner and the amount of pay for sex workers transvestites also influence condom use.

Understanding the factors that influence condom use is essential for designing effective prevention programs for populations such as MSM and transgender women. Interventions to increase knowledge related to HIV and sexually transmitted diseases are not enough to increase condom use, but interventions to change attitudes and behaviors such as substance use are also necessary.

Family and peer involvement in support also has a positive impact on condom use among MSM and transgender women. Good behavior towards condom use is not suitable without family and peer support. The quality of the relationship between family and individuals is needed to assist MSM and transgender in reducing risky sexual behavior and problem-solving when facing the problem, primarily related to condom use.

The review also finds that sex partners also contribute to condom use, including the type of partner and the amount paid by sex partners. The method of condoms with partners remains lower compared to casual partners and with commercial partners. But MSM or transgender who works as sex workers tends not to use condoms if they are paid more money by their sex partners (clients).

6. Limitations

In this study, we reviewed many studies related to the determinant of condom use in MSM and transgender people in the Southeast Asia region. The findings provide information valuable to improve intervention to increase condom use among MSM and transgender women. However, some limitation were encountered. This study conducted in the literature form rather than a meta-analysis, thus we can not pool the data for describing the effect size of each study.

6. Conclusion

This study investigates related factors that influence condom use. Several factors are noted from individual, social, family and sex partners. Further research, especially intervention research, needs to consider the factors that influence condom use before developing interventions in MSM and transgender women.

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